



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/699,963	11/03/2003	Noah Montena	205P122	5091
20874	7590	03/23/2006	EXAMINER	
WALL MARJAMA & BILINSKI 101 SOUTH SALINA STREET SUITE 400 SYRACUSE, NY 13202			THOMAS, LUCY M	
			ART UNIT	PAPER NUMBER
			2836	

DATE MAILED: 03/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/699,963	MONTENA, NOAH	
	<b>Examiner</b>	<b>Art Unit</b>	
	Lucy Thomas	2836	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 January 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4,6,7 and 12-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15 and 16 is/are allowed.
- 6) ☒ Claim(s) 1-4,6,7 and 12-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>2/09/2006</u>   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Information Disclosure Statement*

1. The information disclosure statement (IDS) submitted on 2/09/2006 was filed after the mailing date of the Office Action on 9/12/2005. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

### *Double Patenting*

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claim 1 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-4 of U.S. Patent No. 6,683,773. Although the conflicting claims are not identical, they are not patentably distinct from each other because differences between the two sets of claims are obvious design

Art Unit: 2836

variations well within the abilities of persons of ordinary skill in the art. The claims of both the current invention and US Patent No. 6,683,773 disclose a high voltage surge protection device adapted for use in CATV that includes a coaxial cable, said surge protection devices comprising: a housing 10 having an input end 16 and a body portion 14 that defines an internal cavity 20; an electronic component 28 positioned within said cavity; and an electrically conductive surge protective element 42. Claim 1 of the current invention recites that the surge protective element is positioned between said input end and said electronic component and in electrically operative communication with the body portion of the housing, whereas Claim 4 of US Patent No. 6,683,773 also limits the protection device further extends from the head of the second pin, which would be positioned between the said input end and said electronic component, and comprises a body in electrically conductive relation to communication with said body portion of the said housing. The said body is part of the protection device and is necessary for the creation of spark gap. However, Claim 1 additionally recites that the electronic component is entirely within said cavity and that the surge protective element is a ring in physical and electrical contact with a shoulder formed within said body portion of said housing. However, it would have been obvious to those skilled in the art at the time the invention was made that the electronic component would necessarily be positioned entirely within the cavity to effectively physically shield the electronic component from environmental conditions such as excessive light, heat, moisture, stress, etc. The patented claims recite that the surge protective element extends radially outwardly from the head of the second pin, which would imply a ring shape. It

Art Unit: 2836

would have been obvious that the surge protective element would be formed in the shape of a ring to facilitate insertion, removal and replacement of the surge protective device and furthermore it would be in physical and electrical contact with the housing as this configuration is necessary for surge protection and to hold the surge protective element within the body of the housing.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

5. Claims 6-7 and 14 are rejected under 35 U.S.C. 102(a) as being anticipated by Chaudhry (US 5,724,220). Regarding Claim 6, Chaudhry discloses a method for providing an alternate path to ground of a high voltage surge carried by a coaxial cable, prior to the surge passing through a coaxial cable connector (Figure 3) having an input end, a body portion 38 defining an internal cavity, a electrical component 10 positioned within the cavity, and an input pin 16 extending forward from the electrical component 10 toward the input end and electrically connected to the center conductor of the coaxial cable, said method comprising the steps of: positioning an electrically conductive ring shaped surge protective element 414,430 (Figures 26-27, which shows an embodiment similar to the one shown Figure 3 with the addition of elements 414,430. Figure 3 is

Art Unit: 2836

relied upon to clearly show the body portion with an internal cavity common to both embodiments) entirely within said cavity and physically and electrically connected to said body portion 38 of said connector; and maintaining an air gap of predetermined size between said surge protective element 414, 430 and said input pin 406 (Column 12, lines 39-55). Regarding Claim 7, Chaudhry discloses a method, wherein said surge protective element includes at least on prong 414 extending radially inward from said ring-shaped element toward said input pin 406. Regarding Claim 14, Chaudhry discloses a method, wherein said electrical component includes a conductive pin 406 extending forward therefrom which is electrically connected to the central conductor of the coaxial cable and said ring-shaped protective element is disposed such that said conductive pin is substantially centered within the said ring-shaped protective element (Column 7, lines 43-51).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 1-4, 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chaudhry (US 5,724,220) in view of Volkenau et al. (3,883,774). Chaudhry discloses a high voltage protection device (Figures 24-29) that includes a coaxial cable

having a central conductor, an outer conductor concentrically positioned in surrounding relation thereto, and a dielectric layer disposed between the central and outer conductors, said surge protection device comprising: a housing 402 having an input end and a body portion that defines an internal cavity; and an electronic component positioned 400 entirely within the said cavity; and an electrically conductive surge protective element 414,416 (Figure 24-25) and 414,430 (Figure 26-29) positioned between said input end and said electronic component, and in electronically operative communication with said body portion, wherein the surge protective element is a semicircular ring and a portion of said ring is in physical and electrical contact with a shoulder formed within the said body of said housing (Column 12, lines 39-67).

Chaudhry fails to disclose a protective element, which is a ring. However, Volkenau discloses a ring protective element 9 (Figures 1-2). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the protective element (semicircular ring) of Chaudhry to a ring shaped protective element to make it more convenient because this shape facilitates repair, replacement, and insertion of the protective element. Claim 3, limits the width of said surge protective element to about 0.020 inches. Chaudhry does not specifically discuss any dimensions of the surge protective element. However, it would have been obvious to provide a surge protective element with the recited width as it has been held that where the prior art discloses the invention except for a result effective variable such as width of the ring, the optimum value of workable ranges would be determined by routine experimentation. Regarding claim 2, Chaudhry discloses at least one prong 414 extending radially inward.

Art Unit: 2836

Regarding claim 4, Chaudhry discloses a conductive pin 406 extending forward from the electrical component and is electrically connected to the central conductor of the coaxial cable, and said ring is disposed such that said conductive pin is substantially centered within said ring (Figures 24-29). Regarding Claim 12, the reference does not disclose that the prong is triangular shaped. However, it has been decided that where the prior art discloses the claimed invention except for a component having a particular shape, matter relating to shape or such designs, which have no mechanical function cannot be relied upon to patentably distinguish the claimed invention from the prior art. *In re Seid*, 161 F.2d 229, 73 USPQ 431 (CCPA 1947). Regarding Claim 13, Volkenau discloses a protection element 9 wherein at least one prong is shaped as a curved semicircular element to create the spark gap of choice.

***Allowable Subject Matter***

8. Claims 15-16 are allowed.

9. The following is a statement of reasons for the indication of allowable subject matter:

The newly added Claim 15 recites a high voltage surge protection device, wherein an electrically conductive, surge protective element positioned between an input end and an electronic component, and in electrical contact with a body portion; and wherein said surge protective element includes a ring shaped portion that surrounds said input conductor, said ring shaped portion not in physical contact with said input conductor; and wherein said ring shaped portion is in physical and electrical



Art Unit: 2836

contact with a shoulder formed within said body portion of said housing. This limitation, in combination with the other recited limitations is not disclosed by the Prior Art of record.

The newly added Claim 16 recites a method for providing an alternate path to ground of a high voltage surge carried by a coaxial cable in a CATV distribution system, prior to the surge passing through a coaxial cable connector comprising the steps of positioning an input pin that provides electrical contact to an electrical component located within a cavity defined by a body portion of a connector, positioning an electrically conductive ring-shaped surge protective element, made entirely of one conductive material, entirely within said cavity so that it surrounds said input pin and so that it physically and electrically connects to said body portion of said connector; and maintaining an air gap of predetermined size between said surge protective element and said input pin. This limitation, in combination with the other recited limitations is not disclosed by the Prior Art of record.

### ***Response to Arguments***

10. Applicant's arguments filed on 1/11/2006 have been fully considered. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a ring shaped portion that surrounds the input conductor, said ring shaped portion not in physical contact with the input conductor) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the

Art Unit: 2836

specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

### ***Conclusion***

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lucy Thomas whose telephone number is 571-272-6002. The examiner can normally be reached on Monday - Friday 8:00 AM - 4:30 PM EST.

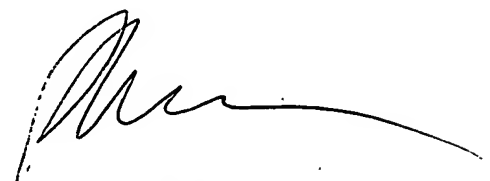
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on 571-272-2058. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2836

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LT

March 15, 2006



PHUONG T. VU  
PRIMARY EXAMINER